

# The Chatham News The Chatham Record

NORTH CAROLINA  
CHATHAM COUNTY

## AFFIDAVIT OF PUBLICATION

Before the undersigned, a Notary Public of said County and State, duly commissioned, qualified, and authorized by law to administer oaths, personally appeared \_\_\_\_\_

Florence Turner

\_\_\_\_\_ who being first duly sworn, deposes and says: that he (she) is

Accounts Receivable Clerk

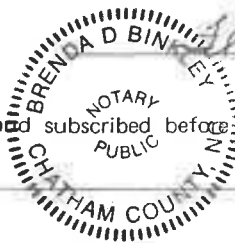
(Owner, partner, publisher, or other officer or employee  
authorized to make this affidavit)

of The Chatham News Publishing Co., Inc., engaged in the publication of a newspaper known as, The Chatham News, published, issued, and entered as second class mail in the Town of Siler City, in said County and State; that he (she) is authorized to make this affidavit and sworn statement; that the notice or legal advertisement, a true copy of which is attached hereto, was published in The Chatham News on the following dates:

October 25 2018

and that the said newspaper in which such notice, paper, document, or legal advertisement was published was, at the time of each and every such publication, a newspaper meeting all of the requirements and qualifications of Section 1-597 of the General Statutes of North Carolina and was a qualified newspaper within the meaning of Section 1-597 of the General Statutes of North Carolina.

This 25<sup>th</sup> day of October, 2018



(Signature of person making affidavit)

Sworn to and subscribed before me, this

25<sup>th</sup>

day of

October, 2018

Notary Public

My Commission expires:

11.07.2020

## Public Notice

North Carolina Environmental  
Management Commission/NPDES Unit

1617 Mail Service Center  
Raleigh, NC 27699-1617

### Notice of Intent to Issue a NPDES Wastewater Permit.

The North Carolina Environmental Management Commission proposes to issue a NPDES wastewater discharge permit to the person(s) listed below. Written comments regarding the proposed permit will be accepted until 30 days after the publish date of this notice. The Director of the NC Division of Water Resources (DWR) may hold a public hearing should there be a significant degree of public interest. Please mail comments and/or information requests to DWR at the above address. Interested persons may visit the DWR at 512 N. Salisbury Street, Raleigh, NC to review information on file. Additional information on NPDES permits and this notice may be found on our website: <http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/npdes-wastewater/public-notices>, or by calling (919) 707-6301. DWR is reopening and proposes to modify permit NC0026441 for Siler City WWTP to add nitrogen limits and associated requirements and schedules. The facility discharges treated industrial and domestic wastewater to Loves Creek, Cape Fear River Basin.

# Chatham News + Record

ATTACHMENT B

## NORTH CAROLINA CHATHAM COUNTY

### AFFIDAVIT OF PUBLICATION

Before the undersigned, a Notary Public of said County and State,  
duly commissioned, qualified and authorized by law to administer  
oaths, personally appeared \_\_\_\_\_ Florence Turner \_\_\_\_\_

\_\_\_\_\_, who  
being first duly sworn, deposes and says: that he (she) is

Accounts Receivable Clerk

(Owner, partner, publisher, or other officer or employee authorized to make this affidavit)

of the Chatham Media Group, LLC., engaged in the publication of  
a newspaper known as, Chatham News+Record, published, issued,  
and entered as second class mail in the Town of Siler City, in said  
County and State; that he (she) is authorized to make this affidavit  
and sworn statement; that the notice or legal advertisement,  
a true copy of which is attached hereto, was published in the  
Chatham News+Record on the following dates:

December 20 2018

and that the said newspaper in which such notice, paper,  
document, or legal advertisement was published was, at the  
time of each and every such publication, a newspaper meeting  
all of the requirements and qualifications of Section 1-597 of the  
General Statutes of North Carolina and was a qualified newspaper  
within the meaning of Section 1-597 of the General Statutes of  
North Carolina.

This 20<sup>th</sup> day of December, 2018

\_\_\_\_\_  
Signature of person making affidavit)

Sworn to and subscribed before me, this 20<sup>th</sup>

day of December, 2018

Brenda D. Binkley

Notary Public

My Commission expires: 11.07.2020

## CLIPPING OF LEGAL ADVERTISEMENT ATTACHED HERETO

PUBLIC NOTICE  
N.C. DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
NOTICE OF EXTENDED  
PUBLIC COMMENT PERIOD  
AND PUBLIC HEARING ON  
INTENT TO MODIFY NPDES

WASTEWATER PERMIT  
#NC0026441  
PERMIT REOPENER

The N.C. Department of Environmental Quality, Division of Water Resources (DWR), is reopening and proposes to modify the National Pollutant Discharge Elimination System wastewater permit for the Siler City Wastewater Treatment Plant owned by the Town of Siler City (P.O. Box 769, Siler City, N.C. 27344), Chatham County, to add nitrogen limits and associated requirements to the permit conditions. The facility discharges treated industrial and domestic wastewater to Loves Creek, a nutrient-impaired waterway in the Cape Fear River basin. Biochemical oxygen demand, ammonia-nitrogen, total residual chlorine, phosphorus, cadmium and total nitrogen are water-quality limited in the permit. This wastewater discharge may impact future allocations to the receiving stream.

The draft wastewater permit and related documents are available online at: <https://bit.ly/2QZUGPI>. Printed copies of the documents may also be reviewed at DWR's Raleigh Regional Office. To make an appointment to review the documents, please call 919-791-4200.

### PUBLIC HEARING

DWR invited public comment on the draft permit starting Oct. 25, 2018, with a comment period end date of Nov. 24, 2018. The comment period end date has now been extended to Jan. 24, 2019. Pursuant to NCGS.143-215.1(c)(3) and Regulation 15 NCAC 02H, Section .0100, the division director has determined that it is in the public interest to hold a hearing to receive additional public comment on the proposed permit action. Therefore, a public hearing on the draft permit is planned for 6 p.m. Jan. 24, 2019 at the Siler City Town Hall Courtroom, 311 N. 2nd Avenue, Siler City, N.C. Speaker registration will begin at 5:30 p.m. DWR will consider all comments received by Jan. 24, 2019 in making its final determination for permit action. D20,1tc

STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DIVISION OF WATER RESOURCES

**PERMIT**

TO DISCHARGE WASTEWATER UNDER THE  
**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended, the

**Town of Siler City**

is hereby authorized to discharge wastewater from a facility located at the

**Town of Siler City WWTP**  
370 Waste Treatment Plant Road  
Chatham County

to receiving waters designated as Loves Creek within the Cape Fear River Basin

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III and IV hereof.

This permit shall become effective ..... ~~May 1, 2019.~~

This permit and authorization to discharge shall expire at midnight ..... May 31, 2019.

Signed this day ..... ~~April 30, 2019.~~

**DRAFT**

---

Linda Culpepper, ~~Interim~~ Director  
Division of Water Resources  
By Authority of the Environmental Management Commission

## SUPPLEMENT TO PERMIT COVER SHEET

*All previous NPDES Permits issued to this facility, whether for operation or discharge are hereby revoked. As of this permit issuance, any previously issued permit bearing this number is no longer effective. Therefore, the exclusive authority to operate and discharge from this facility arises under the permit conditions, requirements, terms, and provisions included herein.*

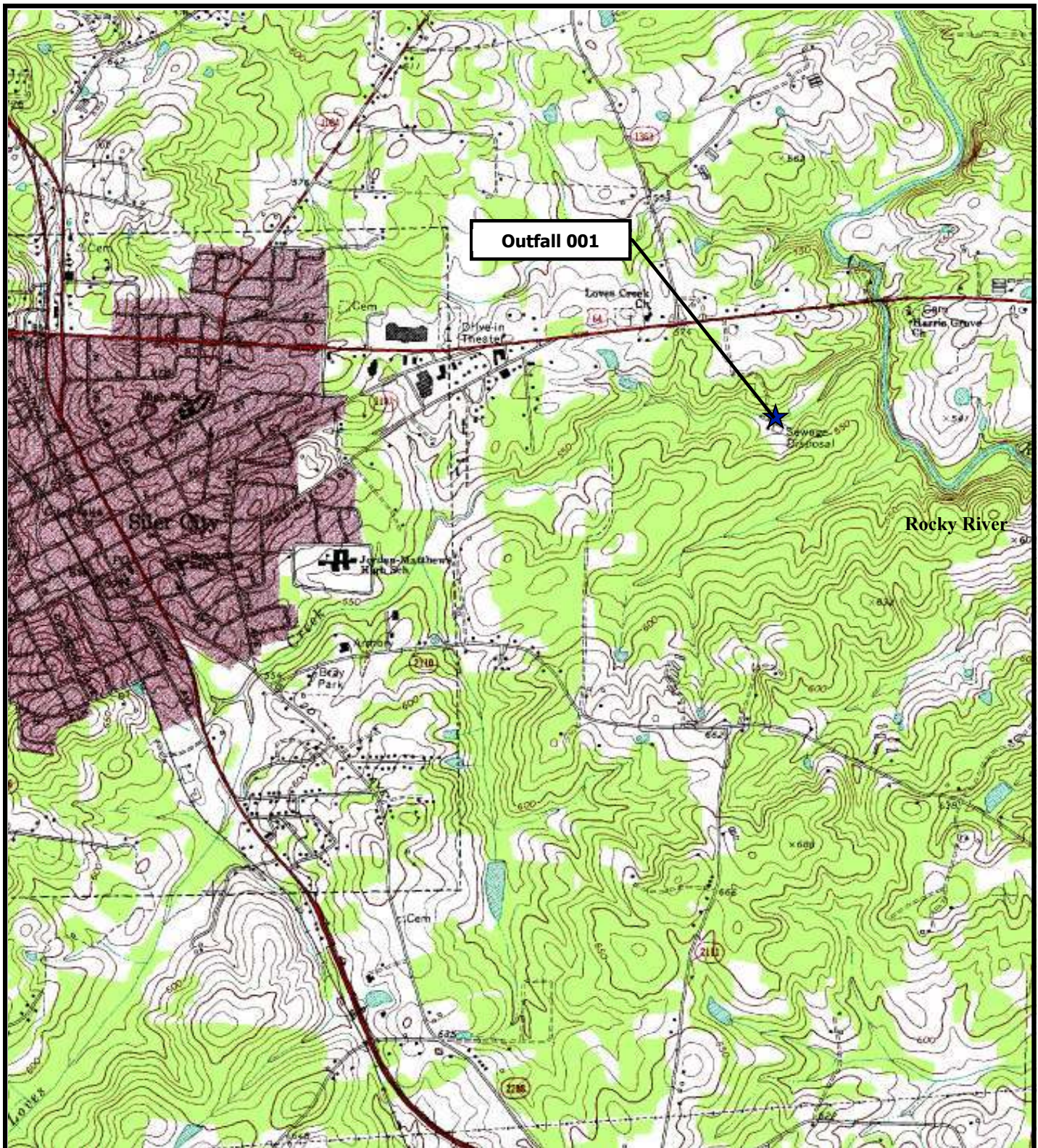
### The Town of Siler City

is hereby authorized to:

1. Continue to operate and discharge from the Siler City WWTP, a 4.0 MGD wastewater treatment facility consisting of:
  - Automatic and manual bar screens
  - Grit collection unit
  - Influent pump station
  - Influent Equalization Basin (Zone 2)
  - Dual oxidation ditches with surface jet aeration
  - Flow Splitter Box
    - Alum feed station
    - Lime feed station
  - Dual secondary clarifiers
  - Dual Aerobic digesters
  - Return Activated Sludge
  - Sludge Transfer Station
  - Dissolved Air Flotation Unit (Used as needed)
  - Sludge Thickener Basin
  - Influent equalization or Sludge Storage Basins (Zone 3 A & B used as needed)
  - Four (4) tertiary filters
  - Filter Backwash Basin
  - Gaseous Chlorine Disinfection
  - Chlorine contact chamber
  - Gaseous Sulfur dioxide Dechlorination
  - Step-Aeration

and located at 370 Waste Treatment Plant Road near Siler City in Chatham County;
2. Upon receipt of an Authorization to Construct from the Division of Water Resources, construct and operate improvements that, at a minimum, add nutrient removal capabilities; and
3. Discharge treated process and domestic wastewater from said treatment works through Outfall 001 at the location specified on the attached map into Loves Creek, which is classified as C waters in the Cape Fear River Basin.





## Town of Siler City WWTP

<b>Latitude:</b>	35° 43' 45" N	<b>State Grid/Quad:</b>	E 21 NW / Siler City, NC
<b>Longitude:</b>	79° 25' 42" W	<b>Permitted Flow:</b>	4.0 MGD
<b>Receiving Stream:</b>	Loves Creek	<b>Drainage Basin:</b>	Cape Fear River Basin
<b>Stream Class:</b>	C	<b>Sub-Basin:</b>	03-06-12
		<b>HUC:</b>	030300030503



*North*

**Facility  
Location**  
not to scale



**NPDES Permit No. NC0026441**  
Chatham County



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**PART I - MONITORING, CONTROLS, AND LIMITATIONS FOR PERMITTED DISCHARGES****A.(1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.] Grade IV Biological WPCS [15A NCAC 08G .0302]

- a. During the period beginning with the effective date and lasting until expiration, the Permittee is authorized to discharge treated wastewater through Outfall 001. Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETERS	EFFLUENT LIMITS			MONITORING REQUIREMENTS		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow	4.0 MGD			Continuous	Recording	Influent or Effluent
Total Monthly Flow (MG)	Monitor and Report			Monthly	Recording or Calculated	Influent or Effluent
BOD, 5 day, 20°C <sup>1</sup> (April 1 thru October 31)	5.0 mg/L	7.5 mg/L		2/Week <sup>2</sup>	Composite	Influent and Effluent
BOD, 5 day, 20°C <sup>1</sup> (November 1 thru March 31)	10.0 mg/L	15.0 mg/L		2/Week <sup>2</sup>	Composite	Influent and Effluent
Total Suspended Solids <sup>1</sup>	30.0 mg/L	45.0 mg/L		2/Week <sup>2</sup>	Composite	Influent and Effluent
NH <sub>3</sub> as N (April 1 thru October 31)	1.0 mg/L	3.0 mg/L		Daily	Composite	Effluent
NH <sub>3</sub> as N (November 1 thru March 31)	2.0 mg/L	6.0 mg/L		Daily	Composite	Effluent
Fecal Coliform (geometric mean)	200/ 100 mL	400/ 100 mL		2/Week <sup>2</sup>	Grab	Effluent
Total Residual Chlorine (TRC) <sup>3</sup>			17 µg/L	Daily	Grab	Effluent
Temperature (°C)				Daily	Grab	Effluent
Dissolved Oxygen	Daily average ≥ 6.0 mg/L			Daily	Grab	Effluent
pH	≥ 6.0 and ≤ 9.0 standard units			Daily	Grab	Effluent
NO <sub>3</sub> -N + NO <sub>2</sub> -N (mg/L)				Weekly	Composite	Effluent
TKN (mg/L)				Weekly	Composite	Effluent
Total Nitrogen <sup>4</sup>				Weekly	Calculated	Effluent
TN Load <sup>5,6</sup>	Monitor and Report (lb/mo) <sup>5</sup> 73,058 lb/year <sup>6</sup>			Monthly Annually	Calculated	Effluent
Total Phosphorus <sup>7</sup> (April 1 thru September 30)	0.5 mg/L (quarterly average)			Weekly	Composite	Effluent
Total Phosphorus <sup>7</sup> (October 1 through March 31)	2.0 mg/L (quarterly average)			Weekly	Composite	Effluent
Total Cadmium	2.1 µg/ L		15.5 µg/ L	Monthly <sup>8</sup>	Composite	Effluent
Total Copper				Quarterly <sup>8</sup>	Composite	Effluent
Total Zinc				Quarterly <sup>8</sup>	Composite	Effluent
Chloride				Quarterly <sup>8</sup>	Composite	Effluent
Chronic Toxicity <sup>9</sup>	P/F at 90%			Quarterly	Composite	Effluent
Effluent Pollutant Scan <sup>10</sup>	Monitor and Report			Footnote 10	Footnote 10	Effluent

Footnotes:

1. The monthly average effluent BOD<sub>5</sub> and Total Suspended Solids concentrations shall not exceed 15% of the respective influent value (i.e., 85% removal is required).
2. Sampling must occur on any two non-consecutive days during the calendar week (Sunday through Saturday).

(Footnotes continue on next page)

**A.(1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)**Footnotes (continued):

3. TRC limits and monitoring requirements apply only if chlorine or chlorine derivatives are used for disinfection. The Permittee shall report all effluent TRC values reported by a NC-certified laboratory [including field-certified]. Effluent values below 50 µg/L will be treated as zero for compliance purposes.
4. Total Nitrogen (TN) is defined as NO<sub>3</sub>-N + NO<sub>2</sub>-N + TKN, where NO<sub>3</sub>-N is nitrate nitrogen, NO<sub>2</sub>-N is nitrite nitrogen, and TKN is total Kjeldahl nitrogen.
5. See Condition A.(12.), Calculation of Total Nitrogen Loads.
- ~~5.6.~~ The effective date of the TN Load limit shall be determined based on the results of the optimization study required in Special Condition A.(611.) and the compliance schedule specified in Special Condition A.(510.) but shall be no later than January 1, 2023.
- ~~6.1. See Condition A.(7.), Calculation of Total Nitrogen Loads.~~
7. Compliance with the Total Phosphorus limits shall be based on a calendar-quarter average of weekly samples.
8. Sample Quarterly in conjunction with Chronic Toxicity Test.
9. Chronic Toxicity (Ceriodaphnia dubia) Pass/Fail at 90%; quarterly testing during March, June, September, December [see Condition A.(107.)].
10. The permittee shall perform three Effluent Pollutant Scans during the term of this permit [see Condition A.(118.)].

- b. Effluent shall contain no floating solids or foam visible in other than trace amounts.

~~The Permittee shall notify the Division of Water Resources no later than 5 business days after its initial receipt of process wastewaters from Mountaire Farms.~~

**A.(2.) INSTREAM MONITORING REQUIREMENTS**

[15A NCAC 02B .0500 et seq.]

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee shall conduct instream monitoring as specified below:

PARAMETER	SAMPLE TYPE	LOCATION <sup>1</sup>	MEASUREMENT FREQUENCY <sup>2</sup>
Dissolved Oxygen	Grab	LCU, LCD, RRU, RRD	3/Week (June – September), 1/Week (October-May)
Temperature	Grab	LCU, LCD, RRU, RRD	3/Week (June – September), 1/Week (October-May)
Total Phosphorus	Grab	LCU, LCD, RRU, RRD	Monthly
TKN	Grab	LCU, LCD, RRU, RRD	Monthly
NO <sub>3</sub> -N + NO <sub>2</sub> -N	Grab	LCU, LCD, RRU, RRD	Monthly

Footnotes:

1. LCU - Loves Creek, upstream of the discharge; LCD - Loves Creek, downstream of the discharge and above the confluence with the Rocky River; RRU - Rocky River, upstream of the confluence with Loves Creek; RRD - Rocky River, downstream of the confluence with Loves Creek.
2. All monitoring is required to be performed at the above-mentioned monitoring locations. Instream Monitoring may be performed by the Upper Cape Fear River Basin Association as outlined in the Memorandum of Agreement (MOA) between the association and the permittee. If so, the data is to be collected and submitted to DWR in accordance to the terms of the MOA. Should membership in this association terminate for any reason, the permittee shall immediately notify the Division's NPDES Unit in writing and resume responsibility to monitor and report the above parameters as specified in this permit.



**A.(3.) NUTRIENT REOPENER**

[G.S. 143-215.1(b)]

In the event that Permittee proposes to accept future industrial process wastewater, in addition to that from Mountaire Farms Phase 2, and that wastewater is expected to contain concentrations of Total Nitrogen (TN) and/ or Total Phosphorus (TP) greater than typical domestic wastewater concentration (i.e. greater than 40.0 mg/L TN or greater than 5.0 mg/L TP), the Permittee shall notify the NPDES Complex Permitting Unit of the Division at 1617 Mail Service Center, Raleigh, NC 27699 and the Raleigh Regional Office at 3800 Barrett Drive, Raleigh, NC 27609 within 30 days of knowledge that the town is considering accepting new industrial process wastewater containing excess nutrients. The notification shall contain information regarding the proposed discharge flow, composition and treatability in the Siler City WWTP. Changes in effluent characteristics may require a permit modification, so notification should be at least 180 days prior to the start of the proposed discharge.

Based on information provided by the Town regarding a potential new industrial process wastewater with high nutrient concentration, and pursuant to N.C. General Statute Section 143-215.1 and the implementing rules found in Title 15A of the North Carolina Administrative Code, Subchapter 2H, specifically, 15A NCAC 2H.0112(b) (1) and 2H.0114(a), and Part II, Sections B-12 and B-13 of this permit, the Director of DWR may then reopen this permit to require supplemental nutrient limits for Total Nitrogen and/ or Total Phosphorus in accordance with the current Basin Plan for the Cape Fear River Basin.

**A.(4.) NUTRIENT WATER QUALITY MODELING REOPENER**

[G.S. 143-215.1(b)]

Pursuant to N.C. General Statutes Section 143-215.1 and the implementing rules found in the North Carolina Administrative Code at 15A NCAC 2H.0112 (b) (1) and 2H.0114 (a) and Part II sections B-12 and B-13 of this permit, the Director of DWR may reopen this permit to require supplemental nutrient monitoring of the discharge. The purpose of the additional monitoring will be to support water quality modeling efforts within the Cape Fear River Basin and shall be consistent with a monitoring plan developed jointly by the Division and affected stakeholders. In addition, the results of water quality modeling may require that limits for total nitrogen and total phosphorus be imposed or modified in this permit upon renewal.

**A.(5.) MERCURY MINIMIZATION PLAN (MMP)**

[G.S. 143-215.1(b)]

The permittee shall develop and implement a mercury minimization plan (MMP) during this permit term. The MMP shall be developed by December 1, 2014, and shall be available for inspection on-site. A sample MMP was developed through a stakeholder review process and has been placed on the Division website for guidance (<http://portal.ncdenr.org/web/wq/swp/ps/npdes>, under Model Mercury Minimization Plan). The MMP should place emphasis on identification of mercury contributors and goals for reduction. Results shall be summarized and submitted with the next permit renewal.

**A.(6.) COMPLIANCE SCHEDULE FOR TOTAL CADMIUM LIMITS**

[G.S. 143-215.1(b)]

The effluent limits for Total Cadmium shall become effective on December 1, 2015. Monitoring shall begin on the permit effective date. Effluent limits and monitoring may be deleted in the future upon written notification of the Division, if the Permittee provides updated effluent data that shows no reasonable potential to exceed applicable State water quality standards. Specifically, if 12 monthly data points for cadmium are all less than 2.0 µg/ L, then the Permittee may petition the Division for removal of Total Cadmium limits and monitoring from the permit.

**A.(7.) CHRONIC TOXICITY PERMIT LIMIT (Quarterly)**

[15A NCAC 02B .0500 et seq.]

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to at an effluent concentration of **90%**.

The permit holder shall perform at a minimum, quarterly monitoring using test procedures outlined in the "North Carolina *Ceriodaphnia* Chronic Effluent Bioassay Procedure," Revised December 2010, or subsequent versions or "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised- December 2010) or subsequent versions. The tests will be performed **during the months of March, June, September and December**. These months signify the first month of each three month toxicity testing quarter assigned to the facility. Effluent sampling for this testing must be obtained during representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

**If the test procedure performed as the first test of any single quarter results in a failure or ChV below the permit limit, then multiple-concentration testing shall be performed at a minimum, in each of the two following months as described in "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-December 2010) or subsequent versions.**

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the months in which tests were performed, using the parameter code **TGP3B** for the pass/fail results and **THP3B** for the Chronic Value. Additionally, DWQ Form AT-3 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Resources  
Environmental Sciences Section  
1621 Mail Service Center  
Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental Sciences Section no later than 30 days after the end of the reporting period for which the report is made.

Test data shall be complete, accurate, include all supporting chemical/physical measurements and all concentration/response data, and be certified by laboratory supervisor and ORC or approved designate signature. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during a month in which toxicity monitoring is required, the permittee will complete the information located at the top of the aquatic toxicity (AT) test form indicating the facility name, permit number, pipe number, county, and the month/year of the report with the notation of "No Flow" in the comment area of the form. The report shall be submitted to the Environmental Sciences Section at the address cited above.

Should the permittee fail to monitor during a month in which toxicity monitoring is required, monitoring will be required during the following month. Assessment of toxicity compliance is based on the toxicity testing quarter, which is the three month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third month.

Should any test data from this monitoring requirement or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

If the Permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included in the calculation & reporting of the data submitted on the DMR & all AT Form submitted.

**NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival, minimum control organism reproduction, and appropriate environmental controls, shall constitute an invalid test and will require immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.**

**A.(8.) EFFLUENT POLLUTANT SCAN**

[G.S. 143-215.1(b)]

- a. The Permittee shall perform a total of three (3) Effluent Pollutant Scans for all parameters listed below. One scan must be performed in each of the following years: **2016, 2017, and 2018**. Analytical methods shall be in accordance with 40 CFR Part 136 and shall be sufficiently sensitive to determine whether parameters are present in concentrations greater than applicable standards and criteria. Samples should be collected with one quarterly toxicity test each year, and must represent seasonal variation [i.e., do not sample in the same quarter every year]. Unless otherwise indicated, metals shall be analyzed as “total recoverable.”

Ammonia (as N)	Trans-1,2-dichloroethylene	Bis (2-chloroethyl) ether
Chlorine (total residual, TRC)	1,1-dichloroethylene	Bis (2-chloroisopropyl) ether
Dissolved oxygen	1,2-dichloropropane	Bis (2-ethylhexyl) phthalate
Nitrate/Nitrite	1,3-dichloropropylene	4-bromophenyl phenyl ether
Kjeldahl nitrogen	Ethylbenzene	Butyl benzyl phthalate
Oil and grease	Methyl bromide	2-chloronaphthalene
Phosphorus	Methyl chloride	4-chlorophenyl phenyl ether
Total dissolved solids	Methylene chloride	Chrysene
Hardness	1,1,2,2-tetrachloroethane	Di-n-butyl phthalate
Antimony	Tetrachloroethylene	Di-n-octyl phthalate
Arsenic	Toluene	Dibenzo(a,h)anthracene
Beryllium	1,1,1-trichloroethane	1,2-dichlorobenzene
Cadmium	1,1,2-trichloroethane	1,3-dichlorobenzene
Chromium	Trichloroethylene	1,4-dichlorobenzene
Copper	Vinyl chloride	3,3-dichlorobenzidine
Lead	<b><u>Acid-extractable compounds:</u></b>	Diethyl phthalate
Mercury (EPA Method 1631E)	P-chloro-m-cresol	Dimethyl phthalate
Nickel	2-chlorophenol	2,4-dinitrotoluene
Selenium	2,4-dichlorophenol	2,6-dinitrotoluene
Silver	2,4-dimethylphenol	1,2-diphenylhydrazine
Thallium	4,6-dinitro-o-cresol	Fluoranthene
Zinc	2,4-dinitrophenol	Fluorene
Cyanide	2-nitrophenol	Hexachlorobenzene
Total phenolic compounds	4-nitrophenol	Hexachlorobutadiene
<b><u>Volatile organic compounds:</u></b>	Pentachlorophenol	Hexachlorocyclo-pentadiene
Acrolein	Phenol	Hexachloroethane
Acrylonitrile	2,4,6-trichlorophenol	Indeno(1,2,3-cd)pyrene
Benzene	<b><u>Base-neutral compounds:</u></b>	Isophorone
Bromoform	Acenaphthene	Naphthalene
Carbon tetrachloride	Acenaphthylene	Nitrobenzene
Chlorobenzene	Anthracene	N-nitrosodi-n-propylamine
Chlorodibromomethane	Benzidine	N-nitrosodimethylamine
Chloroethane	Benzo(a)anthracene	N-nitrosodiphenylamine
2-chloroethylvinyl ether	Benzo(a)pyrene	Phenanthrene
Chloroform	3,4 benzofluoranthene	Pyrene
Dichlorobromomethane	Benzo(ghi)perylene	1,2,4-trichlorobenzene
1,1-dichloroethane	Benzo(k)fluoranthene	
1,2-dichloroethane	Bis (2-chloroethoxy) methane	

- b. **Reporting.** Test results shall be reported on DWR Form-A MR-PPA1 (or in a form approved by the Director) by December 31<sup>st</sup> of each designated sampling year. The report shall be submitted to the Division at the following address:

North Carolina Division of Water Resources  
 Central Files  
 1617 Mail Service Center  
 Raleigh, North Carolina 27699-1617

- c. **Additional Toxicity Testing Requirements for Municipal Permit Renewal.** Please note that Municipal facilities that are subject to the Effluent Pollutant Scan requirements listed above are also subject to additional toxicity testing requirements specified in Federal Regulation 40 CFR 122.21(j)(5). The US EPA requires four (4) toxicity tests for a test organism other than the test species currently required in this permit. The multiple species tests should be conducted either quarterly for a 12-month period prior to submittal of the permit renewal application, or four tests performed at least annually in the four and one half year period prior to the application. These tests shall be performed for acute or chronic toxicity, whichever is specified in this permit. The multiple species toxicity test results shall be filed with the Aquatic Toxicology Branch at the following address:

North Carolina Division of Water Resources  
 Water Sciences Section/ Aquatic Toxicology Branch  
 1621 Mail Service Center  
 Raleigh, North Carolina 27699-1621

- d. Contact the Division's Aquatic Toxicology Branch at 919-743-8401 for guidance on conducting the additional toxicity tests and reporting requirements. Results should also be summarized in Part E (Toxicity Testing Data) of EPA Municipal Application Form 2A, when submitting the permit renewal application to the NPDES Permitting Unit.

#### **A.(9.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS**

[G.S. 143-215.1(b)]

Federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and program reports. The final NPDES Electronic Reporting Rule was adopted and became effective on December 21, 2015.

NOTE: This special condition supplements or supersedes the following sections within Part II of this permit (*Standard Conditions for NPDES Permits*):

- Section B. (11.) Signatory Requirements
- Section D. (2.) Reporting
- Section D. (6.) Records Retention
- Section E. (5.) Monitoring Reports

#### **1. Reporting Requirements [Supersedes Part II, Section D. (2.) and Section E. (5.)(a)]**

The permittee shall report discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application.

Monitoring results obtained during the previous month(s) shall be summarized for each month and submitted electronically using eDMR. The eDMR system allows permitted facilities to enter monitoring data and submit DMRs electronically using the internet. Until such time that the state's eDMR application is compliant with EPA's Cross-Media Electronic Reporting Regulation (CROMERR), permittees will be required to submit all discharge monitoring data to the state electronically using eDMR and will be required to complete the eDMR submission by printing, signing, and submitting one signed original and a copy of the computer printed eDMR to the following address:

NC DEQ / Division of Water Resources / Water Quality Permitting Section  
 ATTENTION: Central Files  
 1617 Mail Service Center  
 Raleigh, North Carolina 27699-1617



**A.(9.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS (cont.)**

If a permittee is unable to use the eDMR system due to a demonstrated hardship or due to the facility being physically located in an area where less than 10 percent of the households have broadband access, then a temporary waiver from the NPDES electronic reporting requirements may be granted and discharge monitoring data may be submitted on paper DMR forms (MR 1, 1.1, 2, 3) or alternative forms approved by the Director. Duplicate signed copies shall be submitted to the mailing address above. See “How to Request a Waiver from Electronic Reporting” section below.

Regardless of the submission method, the first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge.

Starting on **December 21, 2020**, the permittee must electronically report the following compliance monitoring data and reports, when applicable:

- Sewer Overflow/Bypass Event Reports;
- Pretreatment Program Annual Reports; and
- Clean Water Act (CWA) Section 316(b) Annual Reports.

The permittee may seek an electronic reporting waiver from the Division (see “How to Request a Waiver from Electronic Reporting” section below).

**2. Electronic Submissions**

In accordance with 40 CFR 122.41(l)(9), the permittee must identify the initial recipient at the time of each electronic submission. The permittee should use the EPA’s website resources to identify the initial recipient for the electronic submission.

Initial recipient of electronic NPDES information from NPDES-regulated facilities means the entity (EPA or the state authorized by EPA to implement the NPDES program) that is the designated entity for receiving electronic NPDES data [see 40 CFR 127.2(b)].

EPA plans to establish a website that will also link to the appropriate electronic reporting tool for each type of electronic submission and for each state. Instructions on how to access and use the appropriate electronic reporting tool will be available as well. Information on EPA’s NPDES Electronic Reporting Rule is found at: <https://www.federalregister.gov/documents/2015/10/22/2015-24954/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule>

Electronic submissions must start by the dates listed in the “Reporting Requirements” section above.

**3. How to Request a Waiver from Electronic Reporting**

The permittee may seek a temporary electronic reporting waiver from the Division. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to the Division. Requests for temporary electronic reporting waivers must be submitted in writing to the Division for written approval at least sixty (60) days prior to the date the facility would be required under this permit to begin submitting monitoring data and reports. The duration of a temporary waiver shall not exceed 5 years and shall thereupon expire. At such time, monitoring data and reports shall be submitted electronically to the Division unless the permittee re-applies for and is granted a new temporary electronic reporting waiver by the Division. Approved electronic reporting waivers are not transferrable. Only permittees with an approved reporting waiver request may submit monitoring data and reports on paper to the Division for the period that the approved reporting waiver request is effective.

Information on eDMR and the application for a temporary electronic reporting waiver are found on the following web page: <http://deq.nc.gov/about/divisions/water-resources/edmr>

**A.(9.) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS (cont.)****4. Signatory Requirements [Supplements Part II, Section B. (11.)(b) and Supersedes Section B. (11.)(d)]**

All eDMRs submitted to the permit issuing authority shall be signed by a person described in Part II, Section B. (11.)(a) or by a duly authorized representative of that person as described in Part II, Section B. (11.)(b). A person, and not a position, must be delegated signatory authority for eDMR reporting purposes.

For eDMR submissions, the person signing and submitting the DMR must obtain an eDMR user account and login credentials to access the eDMR system. For more information on North Carolina's eDMR system, registering for eDMR and obtaining an eDMR user account, please visit the following web page: <http://deq.nc.gov/about/divisions/water-resources/edmr>

Certification. Any person submitting an electronic DMR using the state's eDMR system shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:

*"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."*

**5. Records Retention [Supplements Part II, Section D. (6.)]**

The permittee shall retain records of all Discharge Monitoring Reports, including eDMR submissions. These records or copies shall be maintained for a period of at least 3 years from the date of the report. This period may be extended by request of the Director at any time [40 CFR 122.41].

**A.(10.) COMPLIANCE SCHEDULE FOR TOTAL NITROGEN LIMIT**

[G.S. 143-215.1(b)]

- a. The Permittee shall comply with the Total Nitrogen limits in Special Condition A.(1.) [and treatment optimization in Condition A.\(11.\)](#) in accordance with the following schedule. ~~See also Condition A.(11.); Treatment Optimization—Total Nitrogen.~~
- b. Schedule of Interim and Final Actions.

Due Date (Optimization)	Due Date (Upgrade)	Scheduled Action
<del>Start</del>		<del>Actual start date of Mountaire Farms discharge to Siler City WWTP.</del>
<del>Start + 3 months 8/1/2019</del>	—	Complete acclimation period, begin nitrogen optimization study.
<del>Start + 13 months 6/1/2020</del>	—	Complete nitrogen optimization study <del>per Condition A.(11.);</del>
<del>Start + 19 months 10/1/2020</del>	—	Evaluate results of study, prepare study report, including methods, findings, and recommendations, and submit to DWR for review.
<del>Start + 22 months 1/1/2021</del>	—	Upon acceptance of report by DWR, implement optimization measures immediately per DWR's written acceptance.
Alternative 1: If the accepted study concludes that optimization measures are sufficient to meet the TN limit in Condition A.(1.) and plant improvements requiring an Authorization to Construct are not necessary, continue to implement optimization measures as accepted and:		
—	1/1/2023	Comply with the TN limit.
Compliance schedule ends, Alternative 1.		

Due Date (Optimization)	Due Date (Upgrade)	Scheduled Action
<u>Alternative 2:</u> If the optimization study indicates that plant improvements requiring an Authorization to Construct are necessary to meet the TN limit in Condition A.(1.), continue to implement optimization measures as accepted and:		
—	4/1/2021	Complete design of the improvements and apply for Authorization to Construct permit from DWR &/or DWI.
—	8/1/2021	Obtain Authorization to Construct permit.
—	10/1/2021	Advertise and award contract.
—	10/1/2022	Complete construction of improvements.
—	1/1/2023	Comply with TN limits.
<i>Compliance schedule ends, Alternative 2.</i>		

- c. No later than 14 calendar days following a due date in the above schedule of compliance, the Permittee shall provide written notification of its progress to the Division of Water Resources. If an action is not completed by the specified date, the Permittee shall also describe the cause of noncompliance and any steps planned or taken to comply with the remainder of the schedule.
- d. For the purposes of this condition, written submittals or notification to the Division should be sent to the following addresses:

NC DEQ/ Division of Water Resources  
NDPES Wastewater Programs  
Attn: Julie Grzyb, Supervisor  
1617 Mail Service Center  
Raleigh, NC 27699-1617

NC DEQ/ Division of Water Resources  
Raleigh Regional Office  
Attn: ~~Danny Smith~~, Water Quality Supervisor  
3800 Barrett Drive  
Raleigh, NC 27609

#### A.(11.) TREATMENT OPTIMIZATION - TOTAL NITROGEN

[G.S. 143-215.1(b)]

- a. The Permittee shall ~~undertake~~conduct a study to evaluate the ability of operational changes and other low-cost measures to reduce its TN discharge load when treating process wastewaters from the Mountaire Farms facility along with its municipal wastes.
- b. Performance Targets. The initial aim of the study is to determine if optimization of the existing plant can achieve an effluent TN concentration of 6.0 mg/L or less when treating process wastewaters from Mountaire Farms. If the plant cannot consistently achieve 6.0 mg/L, the aim of the study will then be to determine what concentration it can achieve; the working target in this case is 30% reduction of TN loads through the plant.
- c. The Permittee shall complete this study and submit a report to the Division according to the schedule in Condition A.(10.), Compliance Schedule for Total Nitrogen Limit.
- d. Study Report. The Permittee shall provide a brief written report of its findings to the Division at the addresses below. The report shall include, at a minimum, the following information:
- A description of the approaches chosen for evaluation and the rationale for their selection;
  - A summary of the methods used and the findings of the study, including the effectiveness of each alternative approach;
  - A budgetary estimate of the potential costs of implementing each alternative found to be effective;
  - The estimated effluent TN concentrations and loads that the existing plant can reasonably and consistently achieve using these methods; and
  - A proposal describing the methods the Permittee proposes to use to minimize its effluent TN loads and indicating whether plant improvements are necessary to meet its TN limits.
- e. For the purposes of this condition, written submittals or notification to the Division should be sent to the addresses in Condition A.(10.)(d.).


- f. Upon the Division's request, the Permittee shall make available any monitoring results or other information relevant to this evaluation.

**A.(12.) CALCULATION OF TOTAL NITROGEN LOADS**

- a. The Permittee shall calculate monthly and annual TN Loads as follows:
- i. **Monthly TN Load (lb/mo) = TN x TMF x 8.34**
- where: TN = the average Total Nitrogen concentration (mg/L) of the composite samples collected during the month
- TMF = the Total Monthly Flow of wastewater discharged during the month (MG/mo)
- 8.34 = conversion factor, from (mg/L x MG) to pounds
- ii. **Annual TN Load (lb/yr) = Sum of the 12 Monthly TN Loads for the calendar year**
- b. The Permittee shall report monthly Total Nitrogen results (mg/L and lb/mo) in the appropriate discharge monitoring report for each month and shall report each year's results (lb/yr) with the December report for that year.



**DEQ/DWR**  
**FACT SHEET FOR NPDES PERMIT MODIFICATION**  
NPDES No. NC0026441

FACILITY INFORMATION			
Permittee:	Siler City		
Permittee Address:	P.O. Box 769, Siler City, NC 27344-0769		
Facility Name:	Siler City WWTP		
Facility Address:	370 Waste Treatment Pond Road	Facility County:	Chatham
Permitted Flow:	4.0 MGD	Facility Status:	Existing
Waste Type:	Municipal (domestic and industrial)	WWTP Grade:	WW-IV
Facility Type:	Municipal, with Full Pretreatment/ LTMP	SIC Code(s):	4952
WATERBODY INFORMATION		ADDITIONAL INFORMATION	
Waterbody Name:	Loves Creek	River Basin:	Cape Fear
Classification:	C	Regional Office:	Raleigh
Subbasin:	03-06-02	USGS Topo Quad:	E21NW
HUC8/12:	03030003/0503	Permit Action:	Reopening/ Modification
Drainage Area (mi <sup>2</sup> ):	7.9	Permit Writer:	Mike Templeton
Assessment Unit:	17-43-10c	Date:	<del>October 17, 2018</del> April 24, 2019 – Draft Permit
7Q10 S/W (cfs):	0.25 / 0.4		
Average Flow (cfs):	8.7		
Listed:	Biological integrity (benthos) Chl-a (Rocky River, downstream)		
IWC (%):	96.1%		

## I. PERMIT ACTION

The Division is reopening and ~~proposes to modify~~ [modifying](#) permit NC0026441 for the Siler City Wastewater Treatment Plant (WWTP) to incorporate effluent limits for total nitrogen (TN) and associated control requirements and compliance schedules.

This Fact Sheet describes the permitted facility, wastewater nutrient sources, receiving streams, and current nutrient requirements; the ~~proposed~~ [revised](#) terms and conditions of the permit and the rationale for the proposed changes; ~~and~~ the schedule and process for accepting and considering public comments ~~prior to~~; [and](#) the ~~Division's final decision~~ [results of a public hearing](#) on the permit. [A public hearing was requested and held, and the results of that process are presented in full in the April 25, 2019 Hearing Officer's report.](#)

The Division issued the permit with minor [revisions](#) and an effective date of [May 1, 2019](#).

## II. BACKGROUND INFORMATION

### A. Facility and Permit Overview

Siler City owns and operates the Siler City WWTP, a 4.0 MGD activated sludge treatment plant. Treatment units include bar screens, grit removal, influent pump station, flow equalization basin (2.0 MG), dual oxidation ditches (2.015 MG each) with surface jet aeration, dual flocculating clarifiers (90' Ø) with chemical addition, four effluent filters, chlorine contact chamber, and dechlorination. Solids are aerobically digested and removed as liquid sludge after thickening.

The Siler City WWTP has long treated a combination of high-strength wastewaters from two poultry processing facilities (Pilgrim's Pride and Townsend Poultry) and its own municipal wastes. The

plant was designed to treat these mixed wastes and comply with the discharge limits for BOD<sub>5</sub>, ammonia nitrogen (NH<sub>3</sub>-N), and total phosphorus (TP) presented in Table 1.

**Table 1. Existing Effluent Limitations (Partial List)**

PARAMETER		EFFLUENT LIMITATIONS	
		Monthly Average	Weekly Average
BOD <sub>5</sub>	(April 1- Oct 31)	5.0 mg/L	7.5 mg/L
	(Nov 1 – March 31)	10.0 mg/L	15.0 mg/L
NH <sub>3</sub> as N	(April 1- Oct 31)	1.0 mg/L	3.0 mg/L
	(Nov 1 – March 31)	2.0 mg/L	6.0 mg/L
Total Phosphorus	(April 1 – Sept30)*	0.5 mg/L (quarterly average)	
	(Oct 1 – March 31)*	2.0 mg/L (quarterly average)	
Total Nitrogen		Monitor Only	

\* Timeframes were modified to accommodate quarterly limits.

[The Town has complied with these limits \(2012-2018\) with a few minor exceptions. The plant has bypassed its final filters multiple times due to storm events and inflow and infiltration \(I/I\) into its collection system, but it has still met the limits.](#)

The permit has not included TN limits; thus, the plant was not designed with denitrification for nitrogen removal.

## B. Receiving Waters

The plant discharges treated wastewaters to Loves Creek, which flows 0.4 mile to the Rocky River and then to the Cape Fear River. The IWC at Loves Creek is 96.1% (7Q10S = 0.25 cfs/0.16 MGD).

Although the plant has generally complied with its BOD<sub>5</sub>, NH<sub>3</sub>-N, and TP limits, a 2011 evaluation by the Division found that:

- high nitrogen levels in its discharge (31.5 mg/L average, 2004-2008) were resulting in high nitrogen concentrations downstream in Loves Creek and further downstream in the Rocky River, and
- the high levels of nitrogen likely contributed to the excess aquatic plant and algal growth observed in the Rocky River downstream of the WWTP and chlorophyll-a violations at Woody's Dam.

The locations and median TN concentrations at the monitoring sites are shown in Figure 1.

Woody's Dam Lake (Reaves Lake) was found to be impaired due to the chlorophyll-a violations and was added to the state's 303(d) list of impaired waters, where it remains. (The lake was drained in the summer of 2017, and the dam is scheduled for demolition.) Other impoundments in the Middle Cape Fear watershed, such as the Cape Fear River behind Buckhorn Dam, have also shown signs of nutrient impacts from a variety of upstream sources and have been added to the 303(d) list.

The Division has not yet conducted nutrient studies in the watershed necessary to develop a comprehensive nutrient management strategy. The Division's Scientific Advisory Council is beginning work on water quality criteria for nutrients. However, that process is just beginning, and results could still be several years away.

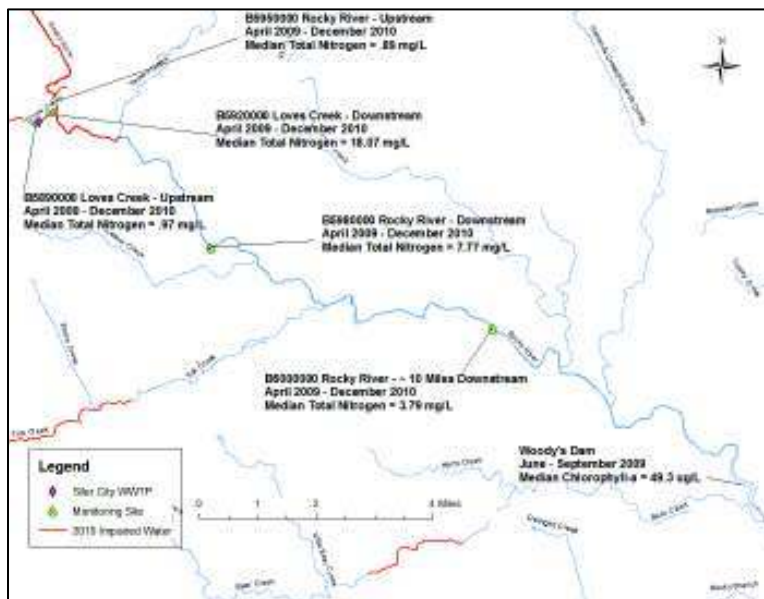
Thus, while there is a clear need to control Siler City's nitrogen discharge in order to protect designated uses in Loves Creek and downstream waters, it has not yet been determined what numeric nutrient limits are necessary and sufficient to protect water quality.

## C. Projected Nitrogen Increases; Permit Action

The Division's report (April 2011) recommended that total nitrogen limits representing best available technology be added to the permit at its 2011 renewal. However, the need for the limits changed. Pilgrim's Pride had already closed its facility (May 2008), Townsend Poultry closed in

October 2011, and neither plant was expected to reopen in the foreseeable future. Without these industrial inputs, effluent TN concentrations from the WWTP declined significantly.

**Figure 1. Water quality monitoring sites**



Rather than add TN limits to the Town's permit, the Division added a reopener condition that provided for the addition of nutrient limits if needed in the future. Special Condition A.(3.), Nutrient Reopener, requires the Town to notify the Division if it intends to accept new industrial wastes with nutrients greater than typical domestic wastes (40 mg/L TN, 5 mg/L TP). It then authorizes the Division to reopen the permit to add supplemental nutrient limits as necessary.

In May 2016, Siler City announced that Mountaire Farms Inc. would operate a new poultry processing facility at the former Townsend Poultry site. Per Condition A.(3.) of its permit, the Town notified the Division on December 9, 2016, that it intended to accept wastewater from the industry beginning in early 2019. Per its permit, the Town conducted a treatability analysis to evaluate the impact of Mountaire Farms' initial (Phase 1) production levels on the Town's discharge. It later conducted a second analysis to examine the impacts at full production (Phase 2).

Mountaire Farms will employ dissolved air floatation to reduce solids, organic wastes, and fats, oils and grease prior to discharging to the Town's treatment plant. However, the pretreatment system is not designed to remove total nitrogen.

The Town estimates that, with the addition of the pretreated poultry wastes, its plant's nitrogen discharge will likely return to previous (2004-2008) levels or greater and impact the receiving waters as before unless significant controls are implemented. The Town's effluent TN concentrations are predicted to be 30 mg/L in Phase 1 and 38 mg/L at Phase 2.

The Division notified the Town by letter on June 8, 2017, that it planned to reopen the permit to address the nutrient issues. These proposed modifications are the result of that action.

### **III. RATIONALE FOR PROPOSED MODIFICATIONS**

The reintroduction of poultry processing wastewaters presents several issues. The expected increase in the Town's nitrogen discharge raises significant concerns about downstream water quality. The lack of a definitive treatment standard means that a chosen TN limit could either result in insufficient nutrient removal if too lenient or unnecessary expense to the Town if too stringent, or both.

A tiered strategy emerged from discussions between the Division and the Town. It provides a balanced approach for addressing these issues:

1. The Town will evaluate operational and low-cost measures in order to optimize the existing plant's removal of nitrogen in the near term.
2. If it finds the plant can consistently meet its TN limit by these simpler means, the Town will implement these measures rather than upgrade the plant.
3. If the results are less successful, the Town will:
  - upgrade the plant as soon as reasonably possible to meet its annual TN Load limit and
  - complete the optimization study and implement the selected measures while the plant upgrade is underway. A 30% reduction of TN would prevent the Town's effluent loads from surpassing historic levels and so will serve as a working target.

The result of this strategy will be that, by the start of 2023, the nitrogen loads from the Town's expanded plant will not exceed its current municipal-only discharge loads (that is, with no poultry processing wastewaters). Loads will most likely increase in the interim, while plant improvements are underway, but the optimization of plant performance will serve to offset that increase to some degree.

The Town's TN loads for past, present, and estimated future discharges are summarized below and illustrated in Figure 2.

- From January 2005 through December 2007, when the Pilgrim's Pride and Townsend Poultry facilities were both operational, the Siler City WWTP discharged an average of 32 mg/L TN at 2.5 MGD, or 667 lb/day TN.
- From February 2016 through August 2017, after both poultry plants had closed, the Town discharged an average of 14 mg/L TN at 1.77 MGD, or 202 lb/day TN.
- The Town estimates that the first phase of production (0.7 MGD from Mountaire Farms) will result in an average discharge of 30 mg/L at 2.57 MGD, or 643 lb/day TN, assuming no improvements or optimization.
- Mountaire Farms now expects that it will increase production much sooner (Phase 2, 1.25 MGD), and the Town estimates that this will increase its discharge to 38 mg/L at 3.12 MGD, or 989 lb/day TN.
- If optimization is effective, it can help offset the increased input from Mountaire Farms. Figure 1 shows the results of 20% and 30% reductions.
- Upgrading its existing 4.0 MGD plant to achieve 6.0 mg/L TN will result in an average design load of 200 lb/day TN at full flow.

It appears that, in order to prevent the Town's discharge from exceeding historic nitrogen loads, either the Town will have to achieve greater than 30% reduction through optimization or Mountaire Farms will have to limit its production until the start of 2023, when the Town's plant upgrades come online.

#### IV. PROPOSED MODIFICATIONS

Based on these considerations, the Division proposes to modify the Town's permit as follows:

- In Special Condition A.(1.), add an annual TN Load limit to become effective no later than January 1, 2023.

$$\text{TN Load} = 6.0 \text{ mg/L} \times 4.0 \text{ MGD} \times 8.34 \times 365 \text{ days/year} = 73,058 \text{ lb/yr}$$

- Add a new Special Condition A.(10.) to establish a compliance schedule for conducting a nitrogen optimization study and interim plant improvements necessary to meet the TN limit in Condition A.(1.); the schedule is based on the timeline proposed by the Town.



- Add a new Special Condition A.(11.) to set forth requirements for a nitrogen removal optimization study and for reporting the results. Upon Division acceptance, the Town will fully implement the selected measures until the interim plant upgrades are completed.
- Add a new Special Condition A.(12.) to specify how annual mass loads are to be calculated.
- Add Total Monthly Flow reporting requirements to Condition A.(1.) along with footnotes referencing the new special conditions.

The proposed permit modification does not affect other limits or requirements of the permit.

**Figure 2. Comparison of Nitrogen Discharge Loads**



## **V. PUBLIC NOTICES OF PERMIT AND HEARING**

Public notice of the draft permit was originally published in *The Chatham News* on October 25, 2018 and posted on the DWQ website. In response to multiple requests received, the Division agreed to hold a public hearing. Public notice of the hearing was published in *The Chatham News + Record* on December 20, 2018, and posted on the DEQ website at <https://deq.nc.gov/news/events/public-hearing-siler-city-wwtp-permit-nc002644>. The public hearing was held on January 24, 2019, at 6:00 p.m., at the Siler City Town Hall Courtroom in Siler City. The purpose of the hearing was to gather comments regarding the proposed reopening and modification of the NPDES permit for the Town's WWTP. Oral and written comments were received at the hearing, and additional written comments were received during the comment period. The comment period ended on January 31, 2019, except that comments from U.S. Fish & Wildlife Service staff were accepted on February 7, in light of the federal government's partial shutdown in January.

Approximately 54 people attended the public hearing including 38 members of the general public; five Town employees or consultants; ten staff members of DWR's Central Office (Raleigh), the Raleigh Regional Office, and DEQ's Public Information Office; and the hearing officer. Nineteen individuals spoke at the hearing.

The public comments and the Division's responses are contained in the April 25, 2019 Hearing Officer's report. After considering all comments received, the Division determined that the proposed permit action is the most effective and timely approach to limit the impacts of the discharge on downstream waters.

The report recommended the following actions:

- The permit should include the total nitrogen limit and the January 1, 2023, compliance date as originally proposed. This leaves the Town slightly more than 3½ years to complete its treatment plant upgrades.
- The milestones for the optimization study should be extended by four months to allow for the delay in permit issuance. The overall schedule should be shortened to 20 months by reducing the time for report preparation from six months to four months.

The permit and this fact sheet have been modified accordingly. The Director signed the permit on April 30 with an effective date of May 1, 2019. The permit's expiration date remains May 31, 2019. The Town has submitted its application for renewal, and the permit will be administratively extended after expiration.

The report also recommended that the Division:

- Meet with the Chatham County Soil and Water Conservation staff and the Town to consider how to promote projects that would reduce nutrient contributions from farms and other sites in the watershed.
- Continue the surface water monitoring project begun in January 2019 and use the results in developing a watershed model for the Rocky River.
- Assist the Town in updating its Headworks Analysis for nitrogen if an update is warranted following completion of the treatment plant upgrades.
- Continue to support the Town in its efforts to reduce I/I flows into its collection and treatment systems.
- Continue to support the Town in its water quality protection efforts.
- Support resolution of the low dissolved oxygen problem at the Hackney Millpond, as appropriate.

Public Hearing Non-Speaker Sign In Sheet

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ATTACHMENT E

#	Name	Written Comments? Y/N	Who Do You Represent?
1	<del>Kathleen Handley</del>	<del>✓</del>	<del>Rocky River Heritage Foundation</del>
2	KAREN LUCIANO	N	Rocky River Heritage Foundation
3	William M. Canby, Jr.	N	Rocky River Heritage Foundation
4	David Honeycutt	N	McGill Associates
5	Hal Whit	N	Rocky River Watch
6	Diana Hales	N	Chatham Co. Commissioner
7	Daphne Hill	N	Rocky River Watch
8	Leona Whitchard	N	League of Women Voters of Rocky River
9	<del>Wita Dukes</del>	<del>N</del>	<del>Rocky River Heritage Foundation</del>
10	Bruce Thompson	N	Town of Silver City
11	Jeff Fish	Y	Upper Plains LLC
12	Forrest Westall	N	McGill Associates
13	Michael Feezor	Y	

Rocky River

# Public Hearing Non-Speaker Sign In Sheet

#	Name	Written Comments? Y/N	Who Do You Represent?
14	Kim Caragias	N	myself
15	David Harris	N	myself
16	Harvey Harnack		Bwn of SE
17	Janet Kesimber		
18	Dave Tompkins	N	1
19	Victor D'Amato	N	Tetra Tech
20	Lorella Harris	N	
21	Charles Smith	N	
22	Chris McCordale	N	Town of Silver City
23	Debra Gould	N	
24	Harlan Couch	N	myself
25	Phillip Cox	N	RRAC
26			
27			

**Hearing Officer Presentation  
January 24, 2019**

**PUBLIC HEARING  
DRAFT NPDES WASTEWATER PERMIT NC0026441  
Town of Siler City  
Siler City WWTP, 370 Waste Treatment Plant Road, Chatham County**

The meeting will please come to order. Before we begin, I ask that everyone turn off or silence all cell phones and pagers as a courtesy to the speakers and to the audience.

Good evening. My name is Tom Fransen. I am the head of the Water Planning Section in the Division of Water Resources' Central Office in Raleigh. I have been appointed to serve as hearing officer for this meeting.

Before we proceed any further, I would like to recognize the elected officials who have signed in with us tonight

**[ READ LIST OF OFFICIALS WHO SIGNED IN ]**  
*(Registration desk staff will provide list of elected officials)*

Are there any other officials who would like to be recognized? If so, please stand and introduce yourselves.

**[ IF SO, ALLOW ALL TO INTRODUCE THEMSELVES ]**

Thank you for joining us tonight.



I would also like to recognize the DEQ representatives here tonight.

[ INTRODUCE STAFF ]

Jeff Poupart, Chief of the Water Quality Permitting Section

Julie Grzyb, Supervisor of the Complex NPDES Permits Branch

Cassidy Kurtz, NPDES Permit Writer

Mike Templeton, NPDES Permit Writer

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*(Registration desk staff will provide any additional names before start of hearing.)*

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In North Carolina, every individual who discharges wastewater or stormwater to waters of the state is required to obtain a National Pollution Discharge Elimination System, or NPDES, permit. The United States Environmental Protection Agency has authorized the N.C. Department of Environmental Quality to issue or deny these permits.

The Division of Water Resources has called this public hearing under the authority of North Carolina General Statutes, Chapter 143-215.1(c)(3), and Regulation 15A North Carolina Administrative Code, Rule 02H .0111.

The purpose of the hearing is to receive public comment on proposed modifications to NPDES permit NC0026441 for the Siler City Wastewater Treatment Plant. Notice of this draft permit was previously published and the comment period opened on October 25, 2018. When the Division agreed to requests for a public hearing, the comment period was extended until today. Due to the interest in this matter, I am extending the comment period and will accept additional written comments until 5:00 p.m. on Wednesday, January 31<sup>st</sup>.

**Our email and mailing addresses are on the handout we have provided at the registration table.**

As hearing officer, I will receive oral and written comments related to the permit. Once the comment period is closed, Division Staff and I will compile a written record of

these proceedings. I will carefully consider all pertinent comments received and submit a report to the Director with my findings and recommendations for final action on the permit.

I will give equal weight to oral and written comments in my deliberations. I will also give equal weight to comments already provided during the initial comment period.

Mike Templeton from the Division of Water Resources will now present information concerning the draft NPDES wastewater permit.

[ PRESENTATION ]

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That concludes our presentation on the draft permit. Next, we will hear from audience members who have signed up to speak. When they have finished, if others in the audience would like to comment, they will have an opportunity to do so. To ensure that we hear from all who wish to speak, there will be a three-minute time limit for providing comments. Staff will keep track of the time and raise a sign to indicate when you have one minute left, 30 seconds left, and when your time is up. As time allows, any speakers who need additional time to conclude their oral comments can do so after those who have signed up to speak have had their opportunity to provide comments.

Please keep your comments concise and limit them to tonight's subject. Comments that address specific scientific, technical, or regulatory concerns with the draft permit will be the most useful in our review process.

It would help me if speakers could provide a written copy of their comments, either tonight or by the end of the comment period. Since that is not always possible, we are recording this proceeding to make sure we capture all of your comments accurately.

Cross-examination of speakers will not be allowed. I may ask questions for clarification. We ask that everyone respect the right of others to speak without interruption.

*If appropriate:* To ensure that everyone has a clear view of the proceedings, we ask that you refrain from waving signs inside the meeting area.

*If there are a lot of signs, we'll ask people to stand at the beginning of the meeting so we can take photos of the signs as part of the hearing record.*

I will now call speakers in the order that they registered. To ensure that our records are accurate, please clearly state your name and, if applicable, the organization you are representing. In addition, we ask that you identify other affiliations you may have that have bearing on your input tonight. For example, if you are appearing on your own behalf, but have obtained information from, or provided research to, another group that is interested in this matter, please tell us. That will be useful in reviewing your comments and any other information you provide.

[ CALL ON SPEAKERS, BY NAME ]

[ AFTER LAST SPEAKER... ]

Is there anyone else that would like to comment? Anyone who ran out of time?

[ ADDITIONAL SPEAKERS, IF ANY ]

Again, if you did not speak tonight but would like to comment on the draft permit, you can submit written comments until 5 p.m. next Wednesday, January 31<sup>st</sup>, to be considered. Those comments should be submitted to the email address or postal address given on the handout available at the registration desk.

Based on the public comments received and information submitted in the permit applications, I will submit a report to the director of the Division of Water Resources with my findings and recommendations for final action on this permit.

I would like to thank all of you for your interest and your attendance tonight. This hearing is adjourned.

Public Hearing  
Siler City WWTP  
NPDES Permit NC0026441  
January 24, 2019

Good evening. My name, again, is Mike Templeton. I am an engineer in the Division's NPDES wastewater program at the Raleigh Central Office, and I'll give a brief introduction and an overview of the changes proposed for Siler City's NPDES permit NC0026441.

The Town of Siler City owns and operates a 4.0 MGD activated sludge wastewater treatment plant. The plant discharges treated wastewaters to Loves Creek, a Class C water and a tributary to the Rocky River.

The plant was designed to treat a combination of high-strength wastewaters from the Pilgrim's Pride and Townsend Poultry processing facilities as well as the Town's municipal wastes. It has consistently complied with permit limits for BOD<sub>5</sub>, ammonia nitrogen (NH<sub>3</sub>-N), and total phosphorus (TP).

The permit has not specified a nitrogen limit, and the plant was not designed to remove nitrogen. High nitrogen levels in the discharge have contributed to excessive aquatic plant and algal growth in the Rocky River and chlorophyll-a levels at Woody's Dam. However, agricultural and residential activities are also significant sources of nutrients in the Rocky River watershed, and the river is also impaired for chlorophyll-a upstream of the confluence with Loves Creek.

Pilgrim's Pride and Townsend Poultry closed in 2008 and 2011, respectively. The Town's nitrogen discharge decreased, and the Division did not add nitrogen limits at the 2014 permit renewal. Instead, it added a new condition that :

- requires the Town to report any plans to accept high-nutrient industrial wastes from new facilities, and
- authorizes the Division to reopen the permit to add nutrient limits to address the increase in nitrogen loading to the Town's treatment plant and its receiving streams.

The Town notified the Division in May 2016 that Mountaire Farms had acquired the Townsend Processing Plant and planned to discharge its wastewaters to the Town's treatment plant. Renovation of the facility began soon after, and the facility began discharging process wastes to the Town in mid-January 2019.

The Division now proposes to reopen the Town's permit NC0026441 to add a nitrogen limit. The proposed permit:

- Adds an annual mass nitrogen limit equivalent to 6.0 mg/L TN at the 4.0 MGD design flow. At that limit, nitrogen discharge from the plant will be approximately the same as it has been with no poultry processors operating. The limit becomes effective no later than January 1, 2023, to allow time for the design and construction of plant improvements needed to meet the limit.
- Requires a nitrogen removal optimization study, which is subject to Division approval and to be implemented within 22 months.
- Establish a compliance schedule with interim milestones for completing these requirements.

The Division first provided notice of the draft permit and invited comments in October 2018. In response to requests from several commenters, it gave notice of this hearing in December 2018. The scope of this permit action is limited to the addition of the nitrogen limit and related requirements, and other permit conditions are not eligible for modification at this time.

This concludes my presentation. I will now turn the hearing back over to Mr. Fransen.



Public Hearing Speaker Sign In Sheet

(19) + 1 repeat

ATTACHMENT H

#	Name	Written Comments? Y/N	Who Do You Represent?
1	Kathleen Hurdley		Rocky River Heritage Foundation (RRHF)
2	John Alderman	Y	Self
3	Sunny Kusan	Y	
4	Connie Allred	Y	Rocky River Watch
5	Karen Kister	Y	
6	Lisa Neal	Y	
7	Joey Howell	Y	
8	Dottie Taylor	Y	
9	ALBERT COOKE	Y	
10	Roger Dinger	N	Rocky River landowner
11	Brady Hildbrand	N	RRW
12	Jean Zhuang	N	RRW
13	Kathryn Maggard	N	RRW
14	Lewis Coragolis	Y	Rocky River Watch

# Public Hearing Speaker Sign In Sheet

#	Name	Written Comments? Y/N	Who Do You Represent?
15	Nita Dukes	N	LNVODC, Rocky River Waterage, SDO
16	Will Henderson	N	Waterkeeper Alliance
17	Emily Sutton	Y	Haw River Assembly
18	Elizabeth Hadley	N	Chatham resident
19			
20	Attil (not signed in):		
21	Jonna Kazinski (sp?)	.	Silver City resident
22			
23	Repeat:		
24	Roger Dinger		
25			
26			
27			
28			